

## ABSTRACT

A control device (30) calculates a voltage command value of a voltage step-up converter (12) based on a torque command value (~~TR1 (or TR2)~~) and a motor revolution number (~~MRN1 (or MRN2)~~) and calculates an on-duty ( $D_{ON\_1}$ ) of an NPN transistor (Q1) based on the calculated voltage command value and a DC voltage ( $V_b$ ) from a voltage sensor (10). When the on-duty ( $D_{ON\_1}$ ) is influenced by a dead time of NPN transistors (Q1, Q2), control device (30) fixes the on-duty ( $D_{ON\_1}$ ) at 1.0 to control the NPN transistors (Q1, Q2) in such a manner that the voltage is increased or decreased.